

Claims

What is claimed is:

1. A monitoring apparatus for monitoring system pressure in a braking system, comprising:
  - at least one pressure detection device for measuring system pressure and responsively producing an output signal; and
  - at least one monitoring device for receiving said output signal and sampling said output signal at pre-determined intervals continually during operation of the vehicle.
2. The monitoring apparatus as set forth in claim 1, wherein:
  - the braking system includes a pressure storage device; and
  - said pressure detection device is coupled with said pressure storage device.
3. The monitoring apparatus as set forth in claim 2, wherein said pressure storage device is an accumulator.
4. The monitoring apparatus as set forth in claim 1, wherein said monitoring device is a programmable electronic control module.
5. The monitoring apparatus as set forth in claim 1, further including an alarming device in communication with said monitoring device.

6. The monitoring apparatus as set forth in claim 5, wherein:  
said monitoring device is adapted to produce a fault signal upon  
abnormal behavior in the system pressure; and

said alarming device is adapted to produce an alarm signal when  
said alarming device receives said fault signal from said monitoring device.

7. The monitoring apparatus as set forth in claim 1, wherein  
said pressure detection device is a pressure transducer.

8. The monitoring apparatus as set forth in claim 1 wherein  
said step of monitoring said output signal occurs upon the occurrence of a pre-  
determined condition of the vehicle.

9. A monitoring apparatus as set forth in claim 8 wherein the  
pre-determined condition is a pre-determined RPM value.

10. A method of monitoring system pressure in a braking  
system of a vehicle, comprising the steps of:  
measuring system pressure and responsively producing an output  
signal; and  
monitoring said output signal and sampling said output signal at  
pre-determined intervals continually during operation of the vehicle.

11. The method of monitoring fluid pressure as set forth in  
claim 10, further comprising the step of:

computing at least one of the following conditions: (i) a charge pressure, (ii) a cut-in pressure, (iii) a cut-out pressure, (iv) a time it takes to charge said pressure storage device to the charge pressure, (v) and a loss in pressure in the braking system.

12. The method of monitoring fluid pressure as set forth in claim 11, further including the step of:

comparing at least one of said conditions to pre-determined limits.

13. The method of monitoring fluid pressure as set forth in claim 12, further including the step of:

producing a fault signal when at least one of said conditions exceed said limits.

14. The method of monitoring fluid pressure as set forth in claim 13, further including the step of:

activating an alarming device when said monitoring device produces said fault signal.